Remarks

This application has been reviewed in light of the Office Action of January 11, 2005. Claims 1-22 are pending. Claims 3, 5, 7, 9, and 10 are withdrawn from consideration, and claims 1, 2, 4, 6, 8, and 11-22 are rejected. In response, a typographical error in the Specification is amended; claims 14 and 22 are amended; new claims 23-26 are added; and the following remarks are submitted. Reconsideration of this application, as amended, is requested.

Applicant maintains its traverse of the restriction requirement.

Claims 1-22 are rejected under 35 USC 112 as failing to comply with the enablement requirement in respect to the temperature of the obscuring agent. Applicant traverses this ground of objection.

The Specification provides enablement, for example in the following language found in para. [0007] of the Specification:

> "The obscuring agent has a temperature of less than that of the hot region. In a typical case, the obscuring agent is ejected at a temperature of less than 150°C, so that it does not itself serve as a significant infrared emitter."

At no point of the Specification, including page 3, lines 8-9, is there any suggestion that the present invention is inoperable if the obscuring agent is ejected at a temperature of greater than about 150°C.

As stated in para. [0030] of the Specification,

> "Preferably, the obscuring agent 46 is ejected at a temperature of less than about 150°C. At this temperature, it is below a temperature at

which the obscuring agent 46 itself could serve as an infrared emission source for available infrared seekers." [emphasis added]

Ejecting at a temperature of less than about 150°C is preferred but not necessary. If the obscuring agent is ejected at a temperature of greater than about 150°C, there may be some infrared emission from the obscuring agent, but it still serves to obscure the even-hotter exhaust gas of the aircraft.

Applicant requests that the Examiner reconsider and withdraw this ground of rejection.

Claim 11 is objected to. Applicant traverses this ground of objection.

The language of claim 11, "providing a mixture of carbon dioxide gas and water vapor as the obscuring agent", is narrower and more limiting than the language of claim 1, "the obscuring agent comprises carbon dioxide gas, or water vapor, or a mixture thereof". Claim 1 permits carbon dioxide gas alone or water vapor alone to be the obscuring agent, while claim 11 does not.

Applicant requests that the Examiner reconsider and withdraw this ground of objection.

Claim 22 is rejected under 35 USC 102 "as being anticipated by the well-known process of fighting a fire." Applicant does not understand what "well known process" this statement of a rejection refers to. Accordingly, Applicant traverses this ground of rejection.

The "well known process of fighting a fire" is not described in relation to the claims. Applicant has no idea what "well known process" the rejection is referring to.

Further, as to a rejection based on "well known" prior art, even where it is described, "well known" is not a class of statutory prior art recognized in 35 USC 102 or 35 USC 103. Applicant traverses this substitution of asserted "well known" prior art for a statutory prior art reference as applied in the context of the claim. Here, the

matters asserted to be "well known" are not, in this context, to the extent that Applicant can understand what is said to be "well known". Applicant requests that, if the rejection is maintained, the Examiner apply a statutory prior art reference and set forth a rejection that incorporates the statutory prior art. MPEP 2144.03.

If the process is well known, it should be easy to apply a reference to form the rejection. The explanation of the rejection at page 4, lines 1-2, refers to "the document 'Concorde Accident'" as containing an example of the "well known" technique. If so, then this document may be applied as the prior art to support the rejection. Absent the application of such statutory prior art in the statement of the rejection, Applicant requests that the rejection be withdrawn.

The explanation of the rejection has a reference to "the document 'Concorde Accident'". No such document is of record.

Applicant requests that the Examiner reconsider and withdraw this ground of rejection.

Claims 1, 2, 4, 11, 14, 15, 17, and 22 are rejected under 35 USC 102 or 35 USC 103 over "applicant's admissions on page 4, lines 7-11 of the specification". Applicant traverses this ground of rejection.

The language at page 4, lines 7-11 is part of the Summary of the Invention. It is not stated to be "prior art". MPEP 2129 II provides what may be used as "admitted" prior art from the Specification:

> "Where the specification identifies work done by another as 'prior art,' the subject matter so identified is treated as admitted prior art."

This position is supported in the MPEP by a reference to In re Nomiya, "holding applicant's labeling of two figures in the application drawings as 'prior art' to be an admission that what was pictured was prior art relative to applicant's improvement".

The present Specification does not label or otherwise identify anything as "prior

art", and specifically does not identify the material at page 4, lines 7-11 as "prior art". Accordingly, the material at page 4, lines 7-11 is not to be taken as admitted prior art according to MPEP practice as set forth in MPEP 2129 II.

If it is established that such were prior art, it would not anticipate or make obvious the present approach. Claim 1 reads in part:

> "ejecting the obscuring agent from a dispensing location on the aircraft so as to flow between the hot region and the external viewing location, wherein the obscuring agent has a temperature of less than that of the hot region". [emphasis added]

Claims 17 and 22 have similar recitations.

The addition of water or other coolant to the hot combustion gas stream is not a "flow between the hot region and the external viewing location" as recited in the claims. Such an added coolant is not an "obscuring agent". The difference is that the addition of a cool substance to a hot flow cools the hot flow and reduces its infrared emission, while the "flow between the hot region and the external viewing location" does not change the nature of the infrared emission of the hot flow at all, but instead obscures the infrared emission of the hot flow and renders it less visible.

The explanation of the rejection relies extensively on assertions of what is "inherent". MPEP 2112-2113 sets forth the law on inherency. Inherency is not to be taken lightly and not to be asserted unless there is good evidence to suggest that the asserted property or characteristic is necessarily present in the teachings of the prior art reference. The concept of inherency is not provided as a way to fill in the gaps in missing disclosure or teachings based upon speculation, unless the asserted property or characteristic may be shown to be necessarily present by objective evidence. Instead, "inherency" is used when every aspect of the disclosure of a reference and the claimed subject matter are otherwise exactly the same, then it may be inferred that some property or characteristic further recited in the claim must necessarily be present in the art reference. MPEP 2112 provides "The fact that a certain result or characteristic may

occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993); In re Oelrich, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted) "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)"

Applicant asks that the Examiner reconsider and withdraw this ground of rejection.

Claims 1, 2, 4, 8, 11, 14, 15, 16, 17, 19, and 22 are rejected under 35 USC 102 as anticipated by Nye US Patent 4,002,024. Applicant traverses this ground of rejection.

The following principle of law applies to sec. 102 rejections. MPEP 2131 provides: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the ... claim. The elements must be arranged as required by the claim..." [citations omitted] This is in accord with the decisions of the courts. Anticipation under section 102 requires 'the presence in a single prior art disclosure of all elements of a claimed invention arranged as in that claim.' Carella v. Starlight Archery, 231 USPQ 644, 646 (Fed. Cir., 1986), quoting Panduit Corporation v. Dennison Manufacturing Corp., 227 USPQ 337, 350 (Fed. Cir., 1985)

Thus, identifying a single element of the claim which is not disclosed in the reference is sufficient to overcome a Sec. 102 rejection.

Claim 1 recites in part:

"providing on the aircraft a source of an obscuring agent, wherein the obscuring agent comprises carbon dioxide gas, or water vapor, or a mixture thereof" [emphasis added]

Claim 17 recites in part:

"providing on the aircraft a source of an obscuring agent, wherein the obscuring agent comprises a mixture of carbon dioxide gas and water vapor, and wherein the obscuring agent comprises a portion of the exhaust gas of an engine on the aircraft" [emphasis added]

Claim 22 recites in part:

"providing a source of an obscuring agent, wherein the obscuring agent is stored on board the aircraft or generated on board the aircraft, and wherein the obscuring agent comprises carbon dioxide gas, or water vapor, or a mixture thereof" [emphasis added]

Nye does not disclose these limitations of claims 1, 17, and 22. As observed in the explanation of the rejection, Nye discloses that its source is the ambient air that is drawn into the front of the engine, which is not a source on board the aircraft (claims 1, 17) and is not stored on board the aircraft or generated on board the aircraft (claim 22).

Claim 22 further recites in part:

"ejecting the obscuring agent from a dispensing location so as to flow between the hot region and the external viewing location but not to cool the hot region" [emphasis added]

Nye discloses that the hot region, specifically the exhaust gas plume, is cooled by the dispensed ambient air. The addition of cooler air to the hot combustion gas stream is not a "flow between the hot region and the external viewing location" as recited in the claims. Such an added coolant is not an "obscuring agent". The difference is that the addition of a cool substance to a hot flow cools the hot flow and reduces its infrared emission, while the "flow between the hot region and the external viewing location" does not change the nature of the infrared emission of the hot flow at all, but instead obscures and hides the infrared emission of the hot flow and renders it less visible.

Claim 2 recites in part: "providing a transport aircraft". A transport aircraft is an aircraft whose primary function is to transport cargo or persons other than the crew from one location to another and deliver them intact. Nye has no such disclosure.

Claim 4 recites in part: "providing the aircraft wherein the hot region is a plume of hot gas flowing from the aircraft". Nye does not disclose that the ambient air is dispensed from a location so that it is between the plume and the external viewing location. In Nye's approach, the ambient air is mixed with the plume.

Claim 8 recites in part: "providing the source of the obscuring agent as a portion of an exhaust gas of a main propulsion engine of the aircraft". Nye does not use a portion of the exhaust gas of the engine as an obscuring agent. Nye uses ambient air.

Claim 14 recites in part: "ejecting the obscuring agent so as to obscure a portion of an exhaust gas of an auxiliary power unit of the aircraft." Nye does not discuss an auxiliary power unit at all.

Claim 15 recites in part: "ejecting the obscuring agent so as to obscure a portion of an exhaust gas of a main propulsion engine of the aircraft". The engines discussed by Nye do serve as main propulsion engines, but their exhaust gas is not obscured by

the ambient air that is added in Nye's approach. Instead, the exhaust gas of Nye's approach is just less hot than it would otherwise be, but that less-hot exhaust gas is fully visible at an external viewing location.

Claim 16 recites in part: "ejecting the obscuring agent at a temperature of less than about 150°C". The ambient air disclosed by Nye does not "flow between the hot region and the external viewing location" as recited in claim 1.

Claim 17 recites in part: "providing a transport aircraft". Nye has no such disclosure.

Claim 17 further recites in part: "providing on the aircraft a source of an obscuring agent". Nye has no such disclosure. Nye uses ambient air that is not from a source on the aircraft.

Claim 17 further recites in part: "the obscuring agent comprises a portion of the exhaust gas of an engine on the aircraft". Nye uses ambient air that is not from a source on the aircraft, and specifically from an engine on the aircraft.

Claim 17 further recites in part: "ejecting the obscuring agent from a dispensing location on the aircraft so as to flow between the hot region and the external viewing location". Nye dispenses ambient air into the hot exhaust gas, not between the hot region and the external viewing location.

Regarding claim 19, see the comments for claim 8.

Applicant submits that the application is in condition for allowance, and requests such allowance.

Respectfully submitted,

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